	Α	В	С	D	Е	F	G	Н	I	J	K
							DRAF1				
1						L	JNAFI				
2		AFRE	Programma	atic Guidance	for Anadro	mous Salm	onid Habit	at Restoration Project Planning and Implementation			04/20/2005
3	Project Start Year	Stream	Agreement Number	Working Paper Limiting Factor	Completed (C) or Ongoing (O) Projects	AFRP Restoration Plan "Action"	AFRP Restoration Plan "Evaluation	Completed or Ongoing AFRP Projects	Working Paper, Watershed Limiting Factors not yet addressed	AFRP Restoration Plan Actions <u>not</u> <u>yet</u> addressed	AFRP Restoration Plan Evaluations <u>not</u> <u>yet</u> addressed
4	1998	American River	11332-8-J113	5, p. 3-Xc-38 ^a	С	8, p. 78 ^b		Watershed planning- Survey habitat in Secret Ravine, tributary to Dry Creek	1, p. 3-Xc-37; 3, p. 3-Xc-	1, p. 76; 2, p. 77; 3, p.	4 - 70.0 - 70.0 -
5	1999	American River	11332-9-J021	5, p. 3-Xc-38	С	8, p. 78		Watershed planning- Assist locally led efforts to develop a watershed management strategy for Dry Creek	38; 4, p. 3-Xc-38; 6, p.	77; 5, p. 77; 6, p. 77; 7, p. 78; 9, p. 78; 10, p.	1, p. 79; 2, p. 79; 3, p. 79
6	2003	American River	11332-3-J004	4, p. 3-Xc-38	0	4, p. 77		Water quality- Lower American River Temperature Reduction Modeling Project	3-Xc-38; 7, p. 3-Xc-38	78	-
7	1996	Antelope Creek	11332-6-0186 11332-0-J011	1, p. 3-Xb-34	С	1, p. 50	1, p. 51	Hydrological modeling/monitoring-Maintain real-time flow monitors on Antelope, Mill, Deer, Big Chico and Butte Creeks	2, p. 3-Xb-34		1,p. 51
8	1997	Battle Creek	Amendment to JSA contract: 14- 48-0001-96004 1448-0001-93044	3, p. 3-Xb-21	С	8, p. 48		Fish passage- Investigate solutions to the unscreened Coleman National Fish Hatchery water delivery system, Phase I: Long-term Intake Fix			
9	1997	Battle Creek	11330-7-J024A	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		2, 4, p. 49	Watershed planning- Continue to develop a community-based plan for restoration and preservation of the Battle Creek watershed		- 1, p. 46; 2, p. 47; 3, p. 5, 48; 4, p. 48; 5, p. 48; 6, p. 48; 7, p.48	
10	1998	Battle Creek	OFT	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Anadromous fish monitoring Continue to survey and monitor adult winter- and spring-run Chinook salmon on Battle Creek			
11	1998	Battle Creek	14-48-0001-96004	3, p. 3-Xb-21	С	8, p. 48		Fish passage- Investigate solutions to the unscreened Coleman National Fish Hatchery water delivery			
	1998	Battle Creek	11240-8-M128	3, p. 3-Xb-21	С	8, p. 48		system, Phase III: Develop a study plan for the prototype screen Fish passage- Investigate solutions to the unscreened Coleman National Fish Hatchery water delivery	1, p. 3-Xb-20; 2, p. 3-		
12	1990	Dattie Creek	10181-8-C005			ο, μ. 4ο		system, Phase II: Construct interim solutions to the unscreened intakes at Coleman NFI			1, p. 49; 3, p. 49
13	2000	Battle Creek	11330-9-J081A	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	2, p. 107		Watershed education- Environmental Education Program for Battle Creek Watershed Residents			
14	2000	Battle Creek	10181-0-M712A	5, p. 3-Xa-13	С		4, p. 49	Watershed planning- Halchery Re-evaluation: Assist with analysis of alternative management strategies designed to integrate Coleman National Fish Hatchery operations with restoration of natural populations of Chinook salmon and steelhead in Battle Creel			
15	2000	Battle Creek	11330-0-G104A	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Riparian acquisition and restoration Conservation Easement: Eagle Canyon area Battle Creek			
16	2001	Battle Creek	OFT 11330-1-J113A	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		2, p. 49; 4, p. 49	Watershed planning-Battle Creek Watershed Stewardship, Phase II			
17	1995	Big Chico Creek	11332-5-0228 11332-8-G126	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		14, p. 67	Anadromous fish life history/survival Continue to evaluate the juvenile life history of spring-run Chinook salmon in Butte and Big Chico Creek			
18	1996	Big Chico Creek	11332-6-0187	4, p. 3-Xb-71	С	5, p. 59		Water Quality- Big Chico Creek One Mile Pool Bypass water quality enhancement project			
19	1996	Big Chico Creek	11332-6-0207	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	6, p. 59		Riparian acquisition and restoration Peterson property acquisition and restoration			
20	1999	Big Chico Creek	11332-9-G017	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	1, p.107		Watershed education- Provide "Adopt-A-Watershed" training for teachers in the Chico Unified School District	1, p. 3-Xb-70; 3, p. 3-	1, p. 58; 3, p. 58; 4, p.	
21	1999	Big Chico Creek	11332-9-J028	2, p.3-Xb-71	С	2, p. 58		Fish passage- Provide analyses to improve fish passage through Iron Canyon on Big Chico Creek	Xb-71; 5, p. 3-Xb-71	59; 7, p. 59;	1, p. 60; 2, p. 60
22	2000	Big Chico Creek	11332-0-G014	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	6, p. 59		Riparian acquisition and restoration Pre-Acquisition of the Singh property on Big Chico Creek			
23	2004	Big Chico Creek	11332-4-G003	Superseded by new actions or evaluations in the AFRP Restoration Plan	0	8, p. 60		Watershed planning-Facilitate development of proposals for Big Chico Crk Watershed Alliance			
24	2000	Big Chico Creek	11332-0-G012	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	6, p. 59		Riparian acquisition and restoration Acquire Simmons Ranch on Big Chico Creek			
25	1996	Butte Creek	11332-8-G105 11332-6-O193	27, p. 3-Xb-82	С	21, p. 64		Watershed planning- Continue development of Butte Creek Watershed Conservancy watershed management strategy			

П	Α	В	С	D	Е	F	G	Н	I	J	K
26	1997	Butte Creek	OFT	18, p. 3-Xb-81	С	4, p. 61		Fish passage- Construct a high water volume fish ladder and screens on Durham Mutual Diversion Dam			
27	1997	Butte Creek	11332-7-G195	27, p. 3-Xb-82	С	19, p. 64	***************************************	Riparian acquisition and restoration Keeney Property on lower Butte Creek; riparian easement acquisition and restoration project			
28	1998	Butte Creek	11332-8-J125	22, p. 3-Xb-81	С	22, p. 65		Fish passage Provide preliminary engineering analyses to improve fish passage for the Sanborn Slough Bifurcation on Butte Creek			
29	1998	Butte Creek	11332-8-G116	27, p. 3-Xb-82	С	19, p. 64		Riparian acquisition and restoration Acquire and restore the McAmis property on upper Butte Creek			
30	1998	Butte Creek	11332-8-J104	27, p. 3-Xb-82 27, p. 3-Xb-82	C	19, p. 64		Anadromous fish monitoring- Continue the Lower Butte Creek Study, Phase 1b Geomorphology- Extend Butte Creek geomorphic study to Butte Slough	2, p. 3-Xb-79; 3, p. 3-		
32	1998 1999	Butte Creek	11332-8-J103 11332-9-J006	10, p. 3-Xb-80	C	21, p. 65 16, p. 64		Fish passage- Replace and upgrade existing adult exclusion weir and riser at Drumheller Slough	2, μ. 3-λυ-79, 3, μ. 3- Xb-79; 4, p. 3-Xb-79; 5,		
33		Butte Creek	11332-9-J005	10, p. 3-Xb-80	C	10, p. 04	0 - 05			1, p. 60; 2, p. 61; 3, p.	
34	1999 1999	Butte Creek	11332-9-J005 11332-9-J004	16, p. 3-Xb-80	C		2, p. 65	Fish passage- Provide analyses to improve fish passage at Sutter Bypass East-West Diversion Dam	79; 7, p. 3-Xb-79; 9, p.		
35		Butte Creek			C			Fish passage- Provide analyses to improve fish passage at Sutter Bypass Weir 3 on Butte Creek		p. 62; 8, p. 62; 9, p. 62;	2 n 65: 4 n 66: 7 n
35	1999 1999	Butte Creek Butte Creek	11332-9-J007 11332-9-J003	15, p. 3-Xb-80 27, p. 3-Xb-82	C/O	22, p. 65	10, p. 67	Fish passage- Provide analyses to improve fish passage at Sutter Bypass Weir 5 (Farmers Weir) Watershed planning- Continue to assist locally led efforts to facilitate coordination of the Butte Sink/Sutter	80; 13, p. 3-Xb-80; 14,	10, p. 63; 11, p. 63; 12,	66; 8, p. 66; 9, p. 66;
36	2000	Butte Creek	11332-0-J006 11332-0-J003	11, p. 3-Xb-80	C	22, p. 00	1, p. 65	Bypass stakeholders Fish passage- Develop recommendations for enhanced fish passage in the Butte Slough area on lower Butt		p. 63; 13, p. 63; 14, p. 63; 15, p. 63; 17, p. 64;	12, p. 67; 13, p. 67; 15, p. 68
37	2000	Butte Creek	11332-0-J010	1, p. 3-Xb-78	С	······································	5, p. 66	Creek Hydrological modeling/monitoring Install and maintain real-time flow monitors at the Sanborn Slough	81; 23, p. 3-Xb-81; 24,	20, p. 64; 23, p. 65; 24, p. 65	
38	2000	Butte Creek	11332-0-G002	27, p. 3-Xb-82	C	19, p. 64	σ, ρ. σσ	Bifurcation Structure Riparian acquisition and restoration Promote re-vegetation of recently rip-rapped areas in the vicinity of	p. 3-Xb-81; 26, p. 3-Xb- 81		
39			-			19, p. 64		Okie Dam on Butte Creek Fish passage- Develop a final list of pumping plants requiring screens and collect site specific information fo			
40	2000	Butte Creek	11332-0-J004	25, p. 3-Xb-81	0		6, p. 66	each pumping plant for the east side of Sutter Bypass on lower ButteCreek Fish passage- Lower Butte Creek project Sutter Bypass-Willow Slough Weir Fish Passage; Preliminary			
41	2002	Butte Creek	11332-2-J002	25, p. 3-Xb-81	С	10 p 64	6, p. 66	engineering investigatior			
42	2003	Butte Creek	11332-3-J003	8, 3-Xb-79 Superseded by new	0	18, p. 64		Fish passage- White Mallard Dam and Associated Diversions; Phase III Construction			
42	2004	Butte Creek	11332-4-J001	actions or evaluations in the AFRP Restoration	0		14, p. 67	Anadromous fish life history/survival-Big Chico and Butte Creeks restoration action for spring-run Chinook salmon and steelhead			
43				Plan		Superceded by	Superceded by				
44	1999	Calaveras River	11332-9-G020	Superseded by needs of the AFRP	С	needs of the AFRP	needs of the AFRP	Anadromous fish monitoring Survey spawning habitat for Chinook salmon in the Calaveras River	2, p. 3-Xc-87; 4, p. 3-Xc-	1, p. 84; 2, p. 84; 4, p.	1, p. 84
45	2001	Calaveras River	11332-1-G006	1, p. 3-Xc-87	0		2, p. 85	Anadromous fish life history/survival Lower Calaveras River Chinook Salmon and Steelhead Life History Limiting Factors Analysis	87; 5, p. 3-Xc-88	84	,,,
46	2003	Calaveras River	11332-3-J009	3, p. 3-Xc-87	0	3, p. 84		Fish passage- Retrofit temporary fish passage facilities at Bellota Weir on the Calaveras River			
				Superseded by new							
47	1997	Central-Valley Wide	11330-7-H018	actions or evaluations in the AFRP Restoration Plan	С		7, p. 108	Anadromous fish monitoring Automated fish marking and tagging system, mainstem Sacramento			
48	1998	Central-Valley Wide	11332-8-J200	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Watershed planning-Support of three DFG biologists in Regions1, 2 and 4 to act as HRCs			
49	1998	Central-Valley Wide	11332-9-G032	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	1, p. 107		Watershed education- Support programs to provide educational outreach and local involvement in restoration for teachers and students in the Lodi, Modesto and Merced school districts			
50	1998	Central-Valley Wide	OFT	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Water Quality- Further develop the basis for the Water Acquisition Program			
51	1999	Central-Valley Wide	11332-9-J012 11332-8-J012	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		4, p.108	Anadromous fish life history/survival Continue to conduct a pilot study of the use of otoliths to evaluate the role of Delta rearing in the life history of Central Valley Chinook salmon and steelhead			
52	1999	Central-Valley Wide	11332-9-J027	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		4, p. 108	Anadromous fish life history/survival Analyze the genetics of steelhead/rainbow trout throughout the Central Valley			
53	1999	Central Valley Wide	11332-9-J022	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	2, p. 107		Watershed education- Continue to provide funding for watershed group leaders to attend the "Working at a Watershed Level" course			
54	2000	Central-Valley Wide	11332-0-J028	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP		Watershed planning- Develop an adaptive management forum for large-scale channel restoration projects			
55	2000	Central-Valley Wide	11332-0-G005	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	1, p. 107		Watershed education- Provide support for Kids and Creeks: Restoration Ecology in Action for students in grades 2 through 12 in the Big Chico and Butte Creek and Feather River watersheds			
56	2000	Central-Valley Wide	11332-0-G020	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Anadromous fish monitoring Compile data for estimating hydraulic residence time in Central Valley streams			
57	2001	Central-Valley Wide	10181-2-M382	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	2, p. 107		Watershed education- The Economic Impact of Stanislaus County of Public Land Acquisitions and Conservation Easements on Floodpain lands along the Tuolumne and lower San Joaquin rivers	Not Designated	1, p. 107; 3, p. 107	1, p. 108; 5, p. 108; 8, p. 109; 9, p. 109; 10, p. 109; 6, p. 108

58 59 60 61	2001 2001 2001 2001	B Central-Valley Wide Central-Valley Wide Central-Valley Wide	C 11332-1-J008 11330-1-J084 11332-1-G005	D Superseded by new actions or evaluations in the AFRP Restoration Plan Superseded by new actions or evaluations in the AFRP Restoration Plan Superseded by new	O C	F	G 4, p.105	H Anadromous fish life history/survival Comparative growth of Central Valley Riverine and Delta Rearing Juvenile Chinook Salmon Based on Otolith Microstructure Patterns	ı	J	К
60	2001	Central-Valley Wide	11330-1-J084	actions or evaluations in the AFRP Restoration Plan Superseded by new actions or evaluations in the AFRP Restoration Plan Superseded by new			4, p.105				
60	2001	Central-Valley Wide		actions or evaluations in the AFRP Restoration Plan Superseded by new	С						
			11332-1-G005		 		4, p. 108	Anadromous fish life history/survival Sacramento River: Using molecular techniques to preserve genetic integrity of endangered salmon in a supplementation program			
	2002	Cantral Valley Wide		actions or evaluations in the AFRP Restoration Plan	0		6, p. 40; 9, p .40; 10, p. 41; 11, p. 41; 5, p. 70; 6, p. 108	Anadromous fish life history/survival Biological Assessment of Green Sturgeon in the Sacramento-San Joaquin Watersheds			
62		Central Valley Wide	10181-2-M251	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	2, p. 107		Watershed education- A basic training program that will provide stakeholders with the required information addressing issues in the San Joaquin Valley thus allowing them to make more efficient decisions			
	2002	Central-Valley Wide	11332-2-J006	Superseded by needs of the AFRP	О	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Anadromous fish life history/survival Research of sex reversal in Central Valley Chinook salmon occurrence and population genetic consequences			
63	2002	Central-Valley Wide	11332-8-G122	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	2, p. 107		Watershed education- Provide funding for watershed group leaders to attend the "Working at a Watershed Level" course			
64	2002	Central-Valley Wide	11332-2-H005	Superseded by new actions or evaluations in the AFRP Restoration Plan	0		4, p. 108	Anadromous fish life history/survival Comprehensive Assessment of Genetic Population Structure/Diversity of Central Valley salmon			
65	2003	Central-Valley Wide	11332-3-J001	Superseded by needs of the AFRP	0	Superseded by needs of the AFRP	AFRP	Watershed planning- Support of three DFG biologists in Regions1, 2 and 4 to act as HRCs			
66	2003	Central-Valley Wide	10181-3-V075	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Watershed planning- Update the Handbook on Regulatory Compliance for the AFRP			
67	2003	Central-Valley Wide	11332-3-J002	Superseded by new actions or evaluations in the AFRP Restoration Plan	0		4, p. 108	Anadromous fish life history/survival Evaluate the distribution and relationship of resident and anadromous rainbow trout in the Central Valley			
68	1998	Cosumnes River	11332-8-J114	1, p. 3-Xc-80	С		1, p. 83	Hydrological modeling/monitorinę Develop a hydrologic model for the Cosumnes River			
69	1999	Cosumnes River	11332-9-J013	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		3, p. 83	Anadromous fish life history/survival Assess Chinook salmon and steelhead distribution, habitat use, and food habits within the Cosumnes River Preserve floodplain			
70	2000	Cosumnes River	11332-0-G024	Superseded by new actions or evaluations in the AFRP Restoration Plan	С		3, p. 83	Anadromous fish life history/survival Continue to assess Chinook salmon and steelhead distribution, habitat use, and food habits within the Cosumnes River Preserve floodplain	3, p. 3-Xc-80; 4, p. 3-Xc- 80	1, p. 82; 2, p. 82; 3, p. 82; 4, p. 82; 5, p. 82; 6, p. 82	Complete
71	2000	Cosumnes River	11332-0-J019	2, p. 3-Xc-80	0		2, p. 83	Fish passage- Improve fish passage on the Cosumnes River			
72	2003	Cosumnes River	11332-3-J008	1, p. 3-Xc-80 Superseded by new	0		2, p. 83	Fish passage Compare water supply/resource on Cosumnes River with what is required for successful fish passage			
73	1998	Cow Creek	11330-8-G096	actions or evaluations in the AFRP Restoration Plan	С	Superseded by needs of the AFRP		Anadromous fish monitoring Collect baseline water quality information on Cow Creek	1, 3-Xb-11; 2, 3-Xb-11; 3, 3-Xb-11; 4, 3-Xb-11;	1, p. 43; 2, p. 44; 3, p.	N/A
74	2003	Cow Creek	11330-3-J001	Superseded by new actions or evaluations in the AFRP Restoration Plan	О	Superseded by needs of the AFRP		Watershed planning- Cow Creek Watershed Management Plan	5, 3-Xb-12; 6, 3-Xb-12	44; 4, p. 44	
75	1996	Deer Creek	11332-6-0192	2, p. 3-Xb-50	С	2, p. 56		Watershed planning- Deer Creek- Continue development of a comprehensive Deer Creek watershed			
76	1997	Deer Creek	11332-7-J158	2, p. 3-Xb-50	С	2, p. 56		management strategy Water Quality- Deer Creek- Implement a water quality monitoring program for Mill and Deer Creeks			
77	1997	Deer Creek	11332-7-G190	2, p. 3-Xb-50	С	4, p. 56		Riparian acquisition and restoration Deer Creek riparian easement acquisition, encompassing 465.08 acres of riparian corridor	1, p. 3-Xb-50; 3, p. 3- Xb-51; 4, p. 3-Xb-51; 5,	1, p. 56; 3, p. 56	N/A
78	1998	Deer Creek	11332-8-G014	2, p. 3-Xb-50	С	4, p. 56		Riparian acquisition and restoration To purchase the cons. easements on L&L Cattle Co. and that of J. Gaumer	p. 3-Xb-51	ι, μ. σσ, σ, μ. σσ	
79	2000	Deer Creek	11332-0-G016	2, p. 3-Xb-50	С	4, p. 56	***************************************	Watershed planning- Protect riparian habitat on the Leininger property on Deer Creek			
80	2000	Deer Creek	11332-0-J013	2, p. 3-Xb-50	С	5, p. 56		Watershed planning- Provide preliminary engineering and environmental documents for several erosion control projects in the upper Deer Creek watershed			
81	1998	Merced River	11332-8-J111	2, p. 3-Xb-50	С	3, p. 85		Watershed planning- Merced River corridor stakeholder group and TAC development			
82	1999 1999	Merced River Merced River	11332-9-J031 11332-9-J023	4, p. 3-Xd-7 4, p. 3-Xd-7	C C	3, p. 85 3, p. 85	2, p. 82	Watershed planning- Assist development of locally-led restoration planning efforts Predator-mine pit isolation- Restore in-channel habitat at the Ratzlaff Segment of the Mining Reach			

	Α	В	С	D	E	F	G	Н	1	J	K
								Watershed planning- Evaluate aggregate material source and availability on the Tuolumne and Merced			
	1999	Merced River	11332-9-M075	9, p. 3-Xd-8	С	3, p. 85		rivers and provide an estimate of material required to fill and restore a series of in-channel mining pits in both			
84								river systems			
1	1999	Merced River	11332-9-J024	6, p. 3-Xd-7	С	3, p. 85	2, p. 82	Predator-mine pit isolation- Enhance salmon habitat at the Lower Western Stone segment of the Mining			
85				-, p	-	-, p	-, p	Reach			
00	2000	Merced River	OFT	9, p. 3-Xd-8	С	3, p. 85		Restore fluvial geomorphic features- Federal environmental permits and NEPA documentation for the	1 5 2 7 4 5 2 5 2 7 4		
86				. ,			0	Robinson Reach of the Merced River Salmon Habitat Enhancement Project	1, p. 3-Xd-5; 3, p. 3-Xd-	1 n 05: 0 n 05: 4 n	
	2000	Managed Division	44000 0 1007	4 - 0 24 7	0	0 - 05	Superseded by	Replenish gravel supply- Monitor potential benefits of use of spawning-sized gravel for irrigation diver wing-	6; 5, p. 3-Xd-6; 8, p. 3- Xd-7; 10, p. 3-Xd-7; 11,	1, p. 85; 2, p. 85; 4, p.	3, p. 86
07	2000	Merced River	11332-0-J027	4, p. 3-Xd-7	С	3, p. 85	needs of the AFRP	dam construction	p. 3-Xd-8; 12, p. 3-Xd-8	86; 5, p. 86	
07							Superseded by		p. 3-xu-0, 12, p. 3-xu-0		
	2000	Merced River	OFT	6, p. 3-Xd-7	О	3, p. 85	needs of the	Restore fluvial geomorphic features- Evaluate use of PHABSIM/2D modeling of spawning and rearing			
88	2000	Wichoca Paver	011	ο, ρ. σ-λα-1	0	υ, ρ. υυ	AFRP	habitat to assess benefits of channel restoration on the Merced River			
89	2001	Merced River	10181-1-Y144	4, p. 3-Xd-7	С		1, p. 82	Water Quality- Merced River Temperature Management Feasibility Study			
				, p			Superseded by				
	2002	Merced River	10181-2-M405	2, p. 3-Xd-6	0		needs of the	Passage- A Feasibility Investigation of Reintroduction of Anadromous Salmonids Above Crocker-Huffman			
90							AFRP	Dam on the Merced River			
							Superseded by	Restore fluvial geomorphic features Assess the spawning habitat on the Robinson Reach on the Merced			
	2003	Merced River	11332-3-J010	7, p. 3-Xd-7	0	3, p. 85	needs of the	River			
91						0 05 0	AFRP				
00	2003	Merced River	10181-3-M326	4, p. 3-Xd-7	0	3, p. 85; 2, p.		Riparian acquisition and restoration-Feasibility study and report for restoration work on the Merced River			
92						86					
93	1997	Mill Creek	11332-6-0188	6, p. 3-Xd-7	С	4, p. 53		Riparian acquisition and restoration Continue to restore degraded riparian habitat on sections of lower Mill Creek			
94	1998	Mill Creek	11332-8-J201	5, p. 3-Xb-39	С	2, p. 52		Geomorphology- Study the fluvial geomorphology of Mill Creek			
95	1998	Mill Creek	11332-8-G124	3, p. 3-Xb-39	c	4, p. 53		Riparian acquisition and restoration- Acquire a riparian easement on the Birkes property	1, p. 3-Xb-38; 2, p. 3-	1, p. 52; 3, p. 52	1, p. 53
96	1998	Mill Creek	11332-8-G101	3, p. 3-Xb-39	C	4, p. 53		Riparian acquisition and restoration. Acquire a riparian easement on the Dana property	Xb-39; 4, p. 3-Xb-39	., p, -, p	., p
97	1998	Mill Creek	11332-8-G123	3, p. 3-Xb-39	С	4, p. 53		Riparian acquisition and restoration Acquire a riparian easement on the Latimer property along Mill Creek			
	4000	M. I. B.	44000 0 1400	0 0 0 0 0 0		2, p. 80; 3, p.		Gravel restoration- Replenish and cleanse gravel in areas of the Mokelumne River suitable for salmonid			
98	1998	Mokelumne River	11332-8-J102	3, p. 3-Xb-39	С	80		spawning	1, p. 3-Xc-61; 3, p. 3-Xc-		
99	1999	Mokelumne River	11332-9-J014	2, p. 3-Xc-61	С	2, p. 80		Gravel restoration- Evaluate spawning gravel in the Mokelumne River (Gravel Enhancement)	61; 4, p. 3-Xc-61; 5, p.		
100	2000	Mokelumne River	11332-0-G023	2, p. 3-Xc-61	0	7, p. 81		Riparian acquisition and restoration- Mokelumne River Streambank Improvement Project	3-Xc-62; 6, p. 3-Xc-62;	1, p. 80; 4, p. 80; 5, p.	1, p. 81; 2, p. 81; 3, p.
101	2002	Mokelumne River	11332-3-A004	9, p. 3-Xc-63	С	2, p. 80		Gravel restoration- Gravel modeling on the Mokelumne River	7, p. 3-Xc-62; 8, p. 3-Xc-	80; 6, p. 80; 9, p. 81	81; 4, p. 81
102	2002	Mokelumne River	11332-2-M041	10, p. 3-Xc-63	C	8, p. 81		Water quality- Murphy Creek - Pre-Dam Removal Stream Bed Sediment Characterization	63; 11, p. 3-Xc-64; 12,		
103	2002	Mokelumne River	11332-2-G003	2, p. 3-Xc-61	0	2, p. 80		Gravel restoration- Test Interdisciplinary approach via gravel augmentation	p. 3-Xc-64		
104	2003	Mokelumne River	11332-3-J007	2, p. 3-Xc-61	0	2, p. 80		Gravel restoration- Mokelumne River Spawning Habitat Improvement Project			
	1996	Upper Mainstem	44000 0 0404	4 - 0 Vh 445	0		44 - 400	Anadromous fish life history/survival Misc. Small Streams- Evaluate intermittent east and west-side			
105	1996	Sacramento River	11332-6-0191	1, p. 3-Xb-115	С		11, p. 109	tributaries to the upper mainstem Sacramento River as rearing habitat for juvenile Chinook salmon			
103		Upper Mainstem					1, p. 39; 5, p.				
106	1996	Sacramento River	11332-6-0205	6, p. 3-Xa-13	С	9, p. 38	1, μ. 39, 3, μ. 40	Riparian acquisition and restoration Sacramento River Basin- Pine Creek Orchards property restoration			
		Oddiamento rtivei		Superseded by new			40				
				actions or							
	1997	Upper Mainstem	11330-7-J024B	evaluations in the	С	11, p.38		Riparian acquisition and restoration-Small tributary restoration projects (Western Shasta Resource			
		Sacramento River		AFRP Restoration		7,0	40	Conservation District)			
107				Plan							
	1997	Upper Mainstem	OFT	5, p. 3-Xa-13	С		1, p. 39	Anadromous fish monitoring Tag late-fall-run Chinook salmon for studies in the Sacramento River			
108		Sacramento River		-, p				• · · · · · · · · · · · · · · · · · · ·			
100	1997	Upper Mainstem Sacramento River	OFT	5, p. 3-Xa-13	С		1, p. 39; 2, p. 108	Anadromous fish monitoring Upper Sacramento River wild fish (Chinook salmon) tagging			
100		Upper Mainstem									
110	1997	Sacramento River	11332-7-G159	6, p. 3-Xa-13	С		5, p. 40	Riparian acquisition and restoration Sacramento River Basin- Hartley Island riparian property acquisition			
		Upper Mainstem	11330-7-J045					Anadromous fish life history/survivalSacramento River Genetic maintenance of Hatchery & Natural origin			
	1997	Sacramento River	11330-7-J194	5, p. 3-Xa-13	С		4, p. 108	winter-run Chinook salmon			
111		Oddiamento ravei	11330-7-J090					Willici - un Orimouk Saimon			
				Superseded by new							
		Upper Mainstem		actions or	_			Watershed planning- Upper Sacramento River- Increased law enforcement to enhance protection of			
1	1997	Sacramento River	11332-7-J133	evaluations in the	С	4, p. 107		anadromous fish and habitat		5 n 36:6 n 37:7 -	
112				AFRP Restoration Plan					3, p. 3-Xa-12; 4, p. 3-	5, p. 36; 6, p. 37; 7, p. 37; 8, p. 37; 10, p. 38	2, p. 39; 3, p. 39; 4, p.
112						1, p. 35; 2, p.			Xa-12	5., 5, p. 51, 10, p. 50	39; 6, p. 40; 7, p. 40
1	2000	Upper Mainstem	11330-0-J079	1, p. 3-Xa-12; 2, p.	С	36; 3, p. 36; 4,		Anadromous fish monitoring Winter Chinook mainstem Sacramento River Carcass Survey			
113		Sacramento River		3-Xa-12	_	p. 36					
	2002	Upper Mainstem	OFT	6 n 2 V- 42	0			Watershed planning- Engineering and Environmental documentation for Sacramento River riparian			
114	2003	Sacramento River	OFT	6, p. 3-Xa-13	0	9, p. 38		restoration . La Barranca Unit of the Sacramento River National Wildlife Refuge			
		Llanar Mainstam						Anadromous fish life history/survival Evaluate survival, distribution and contribution of fall-run production			
	1997	Upper Mainstem Sacramento River	OFT	5, p. 3-Xa-13	С		3, p. 108	from the upper mainstem Sacramento River and Coleman National Fish Hatchery during April and May 1997			
115		Sacramento River						illoin the upper mainstern Sacramento River and Coleman National Fish Hatchery during April and Way 1997			
	1997	Upper Mainstem	OFT	1, p. 3-Xg-3; 2, p. 3-	С		8, p. 40	Anadromous fish monitoring Conduct juvenile American shad monitoring in the Delta			
116		Sacramento River	01.1	Xg-3; 3, p. 3-Xg-4				3 ,			
44-	1998	Upper Mainstem	11332-8-G117	6, p. 3-Xa-13	С	9, p. 38	1, p. 39; 5, p.	Riparian acquisition and restoration Acquire riparian land at Chicory Bend			
117		Sacramento River		78		- 7	40				
118	1998	Upper Mainstem	OFT	6, p. 3-Xa-13	С	9, p. 38		Riparian acquisition and restoration Sacramento River Basin- Acquire a riparian easement on Millar			
118		Sacramento River	·				40	Farms Inc., Glenn County			
110	1998	Upper Mainstem Sacramento River	11332-8-G100	6, p. 3-Xa-13	С	9, p. 38		Watershed planning- Upper Sacramento River: Glenn County Property Tax Impacts			
119		Upper Mainstem						Watershed planning- Upper Mainstem Sacramento River- Local Economic Impacts of Public Land			
120	1999	Sacramento River	11332-9-G018	6, p. 3-Xa-13	С	9, p. 38		Acquisition in the Sacramento River Conservation Area: A Case Study of Glenn Count			
	2000	Upper Mainstem	11620-0-J331	6, p. 3-Xa-13	С	9, p. 38		Riparian acquisition and restoration Study the feasibility of restoring floodplain and riparian processes at			
121		Sacramento River					40	the La Barranca Unit of the Sacramento River National Wildlife Refuge on the Sacramento River			
	2000	Upper Mainstem	11332-0-J015	6, p. 3-Xa-13	С		11 p 100	Watershed planning- Upper Mainstream Sacramento River- Provide support to the newly established			
122	2000	Sacramento River	11332-0-3015	υ, μ. υ-Λα-13	C		11, p. 109	Sacramento River conservation Association			
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	Α	В	С	D	E	F	G	Н	I	J	K
123	1997	Sacramento-San Joaquin Delta	OFT	1b, p. 3-Xe-7	С	5, p. 100	3, p. 105	Anadromous fish life history/survival Evaluate survival of coded-wire tagged fall-run Chinook salmon juveniles in the Delta during April and May 1997	1a, p. 3-Xe-7; 1c, p. 3- Xe-7; 1d, p. 3-Xe-7; 2, p. 3-Xe-8; 3, p. 3-Xe-8;	"Operational Target" 1, p. 99; 2, p. 100; 3, p. 100; 4, p. 100 "Supplemental Action Requiring Water" 6, p. 101; 7, p. 101; 8,	1, p. 104; 2, p. 105; 4, p. 105; 5, p. 105; 6, p.
124	1997	Sacramento-San Joaquin Delta	OFT	1b, p. 3-Xe-7	С	5, p. 100	3, p. 105	Anadromous fish life history/survival Evaluate survival of coded-wire tagged late-fall-run Chinook salmon juveniles in the Delta during December 1996-97	4, p. 3-Xe-9; 5a, p. 3- Xe-9; 5b, p. 3-Xe-9; 5c, p. 3-Xe-9; 6, p. 3-Xe-9; 7a, p. 3-Xe-7; 7b, p. 3- Xe-7; 7c, p. 3-Xe-7	p. 102; 9, p. 102; 10, p. 103; 11, p. 103; 12, p. 103; 13, p. 103; 14, p. 103 "Supplemental Action Not Requiring Water" 15, p. 104; 16, p. 104	105; 7, p. 106; 8, p. 106; 9, p. 106; 10, p. 106; 11, p. 106; 12, p. 106; 13, p. 106
125	1999	Sacramento-San Joaquin Delta	11332-9-J026	Superseded by needs of the AFRP	0	Superseded by needs of the AFRP		Gravel restoration- Update and validate the spawning riffle atlas for the San Joaquin tributaries		1, p. 93; 2, p. 93; 3, p.	
126	2000	Mainstem San Joaquin River	11332-0-J030	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Gravel restoration- Study the feasibility of developing a long-term aggregate source for San Joaquin tributary channel restoration projects	1, p. 3-Xd-43; 2, p. 3- Xd-43; 3, p. 3-Xd-44; 4 p. 3-Xd-44; 5, p. 3-Xd		1, p. 94; 3, p. 95; 5, p.
127	2000	Mainstem San Joaquin River	11332-0-J021	Superseded by needs of the AFRP	0	Superseded by needs of the AFRP	needs of the AFRP	accessible to interested parties	44; 6, p. 3-Xd-44; 7, p. 3-Xd-45; 8, p. 3-Xd-45; 9, p. 3-Xd-46	p. 94	95; 6, p. 95; 7, p. 96
128	2000	Mainstem San Joaquin River	11332-0-J022	10, p. 3-Xd-46	С		2, p. 95; 4, p. 95	Hydrological modeling/monitoring Evaluate proposed non-structural flood control management alternatives on the San Joaquin River National Wildlife Refug			
129	2001	Mainstem San Joaquin River	OFT	Superseded by needs of the AFRP	С	Superseded by needs of the AFRP	Superseded by	Anadromous fish monitoring Health Monitoring of Hatchery and Fall-run Chinook Juveniles			
130	1997	Stanislaus River	11300-6-0039.	1, p. 3-Xd-31	0		2, p. 91	Anadromous fish life history/surviva- Juvenile Chinook salmon survival study- tagging and marking			
131	1997	Stanislaus River	11332-0-M007 (AFRP); 10181-1- C024 (B2); for FY 2000	1, p. 3-Xd-31	0		2, p. 91	Anadromous fish monitoring Stanislaus River juvenile Chinook salmon rotary screw trap (RST) monitoring and outmigration study			
132	1998	Stanislaus River	11332-8-J112	3, p. 3-Xd-31	С	2, p. 91		Riparian acquisition and restoration Acquire the Mohler property. Restoration of the Mohler property, Grayson River Ranch and contiguous properties to riparian vegetation and anadromous fish habitat			
133	1998	Stanislaus River	11332-8-M234	3, p. 3-Xd-31	С	2, p. 91		Riparian acquisition and restoration Land acquisition assessment of the Mohler property on the Stanislaus and three properties on the Cosumnes Rive			
134	1998	Stanislaus River	11332-8-J115	8, p. 3-Xd-32	С		2, p. 91	Anadromous fish life history/surviva- Stanislaus River salmon restoration action - Willms site			
135	1999	Stanislaus River	11332-9-J010	8, p. 3-Xd-32	С		2, p. 91	Anadromous fish life history/survival Evaluate the use of radio-tagged juvenile Chinook salmon to identify cause and location of mortality			
136	1999	Stanislaus River	Funds directly from BOR in 1999 and PO 10181-0- M301 in 2000.	8, p. 3-Xd-32	С		2, p. 91	Anadromous fish life history/survival Evaluation of smolt survival	2, p. 3-Xd-31; 4, p. 3- Xd-32; 6, p. 3-Xd-32; 7,	1, p. 90; 3, p. 91	1, p. 91; 3, p. 91; 4, p.
137	1999	Stanislaus River	11332-9-M080	3, p. 3-Xd-31	С	2, p. 91		Riparian acquisition and restoration. Land acquisition assessment of Two-mile Bar	p. 3-Xd-32; 9, p. 3-Xd- 33; 10, p. 3-Xd-33	ι, ρ. σσ, σ, ρ. σ ι	92; 5, p. 92
138	2000	Stanislaus River	11332-0-M017	8, p. 3-Xd-32	С		2, p. 91	Anadromous fish life history/survival Evaluate juvenile Chinook salmon behavior in response to a rotary screw trap	33, 10, p. 3-xu-33		
139	2000	Stanislaus River	11332-0-M009	8, p. 3-Xd-32	С		2, p. 91	Anadromous fish life history/survival Statistical analysis of the 1999 Stanislaus River smolt survival experiment			
140	2000	Stanislaus River	11332-0-M013 and 11332-0- M012	1, p. 3-Xd-31	С		2, p. 91	Anadromous fish monitoring-Outmigrant Trapping of Juvenile Salmonids in the Lower Stanislaus River, Casewell State Park, 1998/1999			
14	2000	Stanislaus River	11332-0-J025	3, p. 3-Xd-31	0	2, p. 91		Gravel restoration- Evaluate acquisition feasibility and channel restoration and aggregate source potential for Two-mile Bar			
142	2000	Stanislaus River	11332-0-J031	3, p. 3-Xd-31	0	2, p. 91		Watershed education- Initiate broader stakeholder outreach and community awareness of restoration issues on the lower Stanislaus Rive			
143	2001	Stanislaus River	11332-1-J003	3, p. 3-Xd-31	0	2, p. 91		Riparian acquisition and restoration Spawning Habitat Restoration in the Stanislaus River			
144	2002	Stanislaus River	10181-2-M629	5, p. 3-Xd-32	0	2, p. 91		Watershed planning- Develop a consensus based plan to direct the long term implementation of prioritized restoration/research in the Stanislaus River below Goodwin Dan			
148	2002	Stanislaus River	11332-2-J004	1, p. 3-Xd-31	0		6, p. 92	Anadromous fish monitorinę- Test of Portable Alaskan Weir on the Stanislaus River			
146	2002	Stanislaus River	10181-2-M406	5, p. 3-Xd-32	0	2, p. 91		Gravel restoration- Continued monitoring for the Knight's Ferry Gravel Replenishment Project - Phase 2			

			0	-	-	-					14
147	A 1996	B Tuolumne River	C 11332-6-0189	D 4, p. 3-Xd-19	E C	F 2, p. 84	G	H Watershed planning- Lower Tuolumne River restoration plan scoping summary and proposed workplan		J	K
147	1997	Tuolumne River	11332-0-0189 11332-7-J189	2, p. 3-Xd-19; 4, p. 3-Xd-19; 5, p. 3-Xd-	С	2, p. 84		Restore fluvial geomorphic features Restore the 7/11 Segment of the Mining Reach Project #1			
148				20; 6, p. 3-Xd-20							
149	1997	Tuolumne River	11332-7-J188	9, p. 3-Xd-20	С	2, p. 84	2, p. 85	Predator-mine pit isolation- Channel Restoration: Special Run Pools 9 and 10			
150	1998	Tuolumne River	11332-8-G121	2, p. 3-Xd-19	С	2, p. 84		Riparian restoration/water temperatures- Acquire a riparian easement and restore Grayson River Ranch	ļ		
151	1998	Tuolumne River	11332-8-G109	2, p. 3-Xd-19	С	2, p. 84		Adaptive management Assist with the peer review process for Tuolumne River Technical Advisory Committee (TAC) supported monitoring efforts			
152	1999	Tuolumne River	11332-9-J026	4, p. 3-Xd-19	0	Superseded by needs of the AFRP		Watershed planning- Update and validate the spawning riffle atlas for the San Joaquin tributaries			
153	1999	Tuolumne River	11332-9-J009	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	2, p. 84		Watershed planning- Assist with technical outreach for the Tuolumne River Technical Advisory Committee - Tuolumne River Corridor Restoration Plan Publication and Public Outreach Workshops	3, p. 3-Xd-19; 7, p. 3-		
154	1999	Tuolumne River	11332-9-M051	4, p. 3-Xd-19	С		1, p. 84	Instream flows- CWT and multiple mark/recapture smolt survival power analysis	Xd-20; 8, p. 3-Xd-20; 10, p. 3-Xd-20; 11, p. 3-	3, p. 88; 4, p. 88; 5, p. 88; 6, p. 88	1, p. 88; 3, p. 89
155	1999	Tuolumne River	11332-9-J025	1, p 3-Xd-18	0	2, p. 84		Restore fluvial geomorphic features- MJ Ruddy Segment of the Mining Reach Project #2	Xd-21	5- 86, 6, p. 86	
156	2000	Tuolumne River	(BOR-FWS Interagency Agreement # 99AA200226), 113320-J018	2, p. 3-Xd-19; 4, p. 3-Xd-19; 5, p. 3-Xd- 20; 6, p. 3-Xd-20	С		2, p. 85	Predator-mine pit isolation- Special Run-Pool 10 dike repair and pre-project monitoring			
157	2000	Tuolumne River	11332-0-J017	9, p. 3-Xd-20	С	2, p. 84		Watershed planning- Tuolumne River Course Sediment Management and Implementation Plan			
158	2001	Tuolumne River Tuolumne River	11332-1-J001 11332-0-J029	5, p. 3-Xd-19 4, p. 3-Xd-19	C C	2, p. 84 2, p. 84		Watershed education- Watershed Outreach and Stewardship Proposal Replenish gravel supply- Enhance salmon and steelhead/rainbow trout spawning habitat by adding gravel to			
159 160	2000	Tuolumne River	11332-0-3029 11332-1-G004	4, p. 3-Xd-19 6, p. 3-Xd-20	0	2, p. 84		three riffles below the Old LaGrange Bridge Restore fluvial geomorphic features-Warner-Deardorff Segment Project #3			
П	2003	Tuolumne River	10181-3-M422	2, p. 3-Xd-19; 4, p. 3-Xd-19; 5, p. 3-Xd-	0		4, p. 89	Instream flows- Upmigration and straying of salmonids on the Tuolumne in response to fall attraction flows and environmental factors			
161		***************************************	***************************************	20; 6, p. 3-Xd-20 2, p. 3-Xd-19; 4, p.		***************************************		and environmental ractors			
162	2004	Tuolumne River	11332-4-N002	3-Xd-19; 5, p. 3-Xd- 20; 6, p. 3-Xd-20	0	2, p. 84		Restore fluvial geomorphic features-MJ Ruddy property mineral appraisal			
163	1996	Yuba River	11332-6-0190	4, p. 3-Xc-13	С	7, p. 72		Fish passage- Daguerre Point Dam Fish Ladder Modification, Diversion Improvements: Feasibility Study and Preliminary Environmental Analysi			
164	1998	Yuba River	11332-8-J106	3(2), p. 3-Xc-12	С	5, p. 72		Hydrological modeling/monitoring Goldfields Adult Fish Exclosure Preliminary Engineering Proposal			
165	1998	Yuba River	11332-8-M245	2, p. 3-Xc-12	С		3, p. 73	Water Quality- Water Temperature Model			
166	1999	Yuba River	11332-9-G008	4, p. 3-Xc-13	С		4, p. 73	Watershed education- Facilitate three public meetings to gain agreement on the initial components of a study plan to evaluate the feasibility of restoring anadromous fish runs above Englebright Dam on the Yuba River			
167	1999	Yuba River	11332-9-J029	3, p. 3-Xc-12	С	5, p. 72; 6, p. 72		Fish passage- Develop Fish Screen and Diversion Bypass Feasibility Alternatives at Hallwood-Cordua Irrigation Headworks			
168	1999	Yuba River	11332-9-G011	Superseded by new actions or evaluations in the AFRP Restoration Plan	0		4, p. 73	Anadromous fish life history/survival Study to Develop a Reference Scale Collection for Juvenile Steelhead in the Lower Yuba River			
169	1999	Yuba River	11332-9-G019	3, p. 3-Xc-12	С	5, p. 72		Anadromous fish life history/survival Determine downstream migration rates of juvenile Chinook salmon and steelhead near the Daguerre Point Dam. Summer 199!	1, p. 3-Xc-12; 5, p. 3-Xc-	1. p. 71; 2. p. 71; 3. p.	
170	2000	Yuba River	11332-0-G026	Superseded by needs of the AFRP	0	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Anadromous fish life history/survival Chinook salmon and steelhead life history evaluation		72; 4, p. 72; 8, p. 72; 9, p. 72; 10, p. 73	1, p. 73; 2, p. 73
171	2001	Yuba River	11332-1-J010	Superseded by new actions or evaluations in the AFRP Restoration Plan	С	AFRP	4, p. 73	Hydrological modeling/monitoring Narrows 2 Hydro Power Plant Flow Bypass System Design			
172	2002	Yuba River	11332-2-J001	2, p. 3-Xc-12	0		3, p. 73	Fish passage- Construction of exclusion device to prevent Yuba River salmon from accessing the Goldfields			
173	2002	Yuba River	11332-2-J007	3, p. 3-Xc-12	0	Superseded by needs of the AFRP	Superseded by needs of the AFRP	Anadromous fish life history/survival Life History/Eval in lower Yuba River			
174	2003	Yuba River	11332-3-J011	Superseded by new actions or evaluations in the AFRP Restoration Plan	0		4, p. 73	Gravel restoration- Spawning Habitat Integrated Rehabilitation Approach (SHIRA)			
175 á								Working Paper. The next set of numbers after the comma refer to the pagination of the Working Paper. next number after the comma refers to the pagination.			
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